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Serial No. 10/747,781
60130-1734; 02MRA364, 368REMARKS

Applicant thanks the examiner for the detailed remarks and analysis. Claims 7-11 and 16 have been withdrawn from consideration. Claims 1-6, 12-15 and 17-22 remain under consideration in this application.

Claims 1, 8, 12-15, 18, 19, 21 and 22 were rejected as being anticipated by Beuchle et al. (U.S. 3,207,267). Claims 1 and 14 require that the angle be changed to control a gain in braking force. Claim 19 recites an applied force and a gain in braking force and requires the varying of the angle of the support to control a gain in braking force.

The examiner argues that varying the angle of supports (5, 18 and 18') controls a gain in self-energization in braking force. Applicant disagrees and requests reconsideration.

Buechle et al. docs disclose a brake that can control an applied force, as any brake assembly can. However, the gain provided by self-energization is fixed relative to the amount of force applied. In other words, for any given applied force, there is a set gain that corresponds only to that applied force. The gain in braking force by self-energization cannot be changed for a given applied braking force.

This is so, because in the Beuchle et al. brake, the self-energization features are fixed. That is the V-groove (16), and the roller (15) and bolt (14) are all fixed. Accordingly, for a given input applied force, a fixed amount of gain will be obtained. This gain in braking force provided by the self-energizing feature cannot be varied as is required by claims 1 and 14, only the amount of applied force can be varied. Variation of an applied force is not the same as varying the gain provided by self-energization. For this reason Buechle et al. cannot anticipate the limitations in claims 1, 14 and 19.

Claim 15 requires the step of varying the angle relative to the gain in braking force. In the Beuchle et al. device, the angle of supports (5, 18 and 18') are changed to vary the applied force, not the gain in braking force as is required by claim 15. The features in the Beuchle et al. device (fixed V-groove (16) and the pin and roller (14,15)) that produce the self-energized gain in braking force are fixed and provide no way to adjust the gain in braking force for an applied braking force.

Claim 22 further defines the braking force as comprising a constant applied force and a generated gain component that is provided by the self-energizing brake assembly, where the

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generated gain component is controlled by varying the angle of the support. This limitation is not disclosed in Beuchle et al. Beuchle et al. merely controls the application of force as is known, not the control of braking force gain provided by the self-energizing features. Accordingly, Beuchle et al. cannot anticipate the claimed limitations.

Claims 1-6, 12-15, 17 and 18-22 were rejected as being anticipated by German Patent DE 1169218 to Hildebrand. Applicant thanks the examiner for requesting a translation of DE '218 and looks forward to receiving a copy as soon as available. However, the information currently available, as best understood by review of Figure 1, the DE'218 patent cannot anticipate the limitations of claims 1, 14 and 19. The examiner reads elements (13 and 17) as a "brake pad" and states that this "brake pad" (13 and 17) is movable along the support (19 and 25).

First, the "brake pad" (13 and 17) as read by the examiner would not be recognized as such by a worker skilled in the art. The supports (19 and 25) are pinned together at pivot points and therefore cannot move along each other. Further, the elements that are pads (23) and (7) can only move toward and away from the rotatable member (3). This is so because the pad (7) moves on the fixed shaft (1) and the pad (23) is attached to the link (25) that pivots about a support (21) that will prevent any sliding movement required to provide a gain in braking force.

With regard to the ball (11) and ramp (9), this cannot provide a self-energization as stated by the examiner. The links (17, 19, 25) are pinned and disposed such that only movement toward and away from the rotating member (3) is possible. There is no possibility of movement of the brake pad (7) relative to the ramps (9) as stated, because the brake pad (7) is mounted for sliding movement in the direction indicated by arrow (5) and cannot move perpendicular to the arrow (5) as would be required to provide any gain in braking force as argued by the examiner.

Claim 2 requires that the brake pad comprise a wedge and a friction element pivotally mounted to the wedge. None of the elements 7, 17 or 27 are friction elements. Element 7 is a support that moves along the shaft 1, element 17 is a link, and element 27 is a spring. Nothing shows the recited configuration.

Claim 3 requires that the rotatable brake element drives the brake pad along a support toward the rotatable brake member to increase braking force. The only sliding portion is the

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clement 7 that can only move perpendicular to the brake member (3) and therefore cannot meet the limitations of claim 3.

Claim 4 requires an adjustable member biasing the support toward the brake member. The only portion in DE '218 shown toward the brake member (3) is arrow 5, that is not any indicative in any way of an adjustable member. Claim 5 requires that the adjustable member is compliant, and claim 6 recites that the adjustable member is a linear actuator. Neither of which are disclosed in DE '218.

Applicant has addressed each objection and rejection and requests reconsideration of the rejections as the claims are believed in condition for allowance. No additional fees are seen to be required. If any additional fees are due, however, the Commissioner is authorized to charge Deposit Account No. 50-1482, in the name of Carlson, Gaskey & Olds, P.C., for any additional fees or credit the account for any overpayment. Therefore, favorable reconsideration and allowance of this application is respectfully requested.

Respectfully Submitted,

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Dated: May 26, 2006